

PCT09

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/890,463

DATE: 01/14/2002
 TIME: 11:45:04

Input Set : A:\ES.txt
 Output Set: N:\CRF3\01142002\I890463.raw

ENTERED

3 <110> APPLICANT: HOECH-GULDBERG, Ove
 4 DOVE, Sophie
 6 <120> TITLE OF INVENTION: PIGMENT PROTEIN FROM CORAL TISSUE
 8 <130> FILE REFERENCE: Q-65619
 10 <140> CURRENT APPLICATION NUMBER: 09/890,463
 11 <141> CURRENT FILING DATE: 2000-08-01
 13 <150> PRIOR APPLICATION NUMBER: PCT/AU00/00056
 14 <151> PRIOR FILING DATE: 2000-02-02
 16 <150> PRIOR APPLICATION NUMBER: PP8463
 17 <151> PRIOR FILING DATE: 1999-02-02
 19 <160> NUMBER OF SEQ ID NOS: 15
 21 <170> SOFTWARE: PatentIn version 3.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 5
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Acropora aspera, Acropora horrida, Montipora caliculata, Porites
 W--> 27 murrayensis, Montipora monasteriata and Porites lobata
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 31 Ser Val Ile Ala Lys
 32 1 5
 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 17
 37 <212> TYPE: PRT
 38 <213> ORGANISM: Acropora horrida
 40 <400> SEQUENCE: 2
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 43 1 5 10 15
 46 Val
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 51 <211> LENGTH: 231
 52 <212> TYPE: PRT
 53 <213> ORGANISM: Acropora aspera
 55 <400> SEQUENCE: 3
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 58 1 5 10 15
 61 Val Asn Gly His Tyr Phe Glu Val Glu Gly Asp Gly Lys Gly Lys Pro
 62 20 25 30
 65 Tyr Glu Gly Glu Gln Thr Val Arg Leu Ala Val Thr Lys Gly Gly Pro
 66 35 40 45
 69 Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln Cys Gln Tyr Gly Ser
 70 50 55 60
 73 Ile Pro Phe Thr Lys Tyr Pro Glu Asp Ile Pro Asp Tyr Val Lys Gln
 74 65 70 75 80
 77 Ser Phe Pro Gly Arg Tyr Thr Trp Glu Arg Ile Met Asn Phe Glu Asp
 78 85 90 95
 81 Gly Ala Val Cys Thr Val Ser Asn Asp Ser Ser Ile Gln Gly Asn Cys
 82 100 105 110

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85 Phe Ile Tyr His Val Lys Phe Ser Gly Leu Asn Phe Pro Pro Asn Gly
86      115      120      125
89 Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Asn Thr Glu Arg
90      130      135      140
93 Leu Phe Ala Arg Asp Gly Met Leu Ile Gly Asn Asn Phe Met Ala Leu
94 145      150      155      160
97 Lys Leu Glu Gly Gly Gly His Tyr Leu Cys Glu Phe Lys Ser Thr Tyr
98      165      170      175
101 Lys Ala Arg Lys Pro Val Lys Met Pro Gly Tyr His Tyr Val Asp Arg
102      180      185      190
105 Lys Leu Asp Val Thr Asn His Asn Lys Asp Tyr Thr Ser Val Glu Gln
106      195      200      205
109 Arg Glu Ile Ser Ile Ala Arg Lys Pro Leu Val Ala Cys Cys Phe Phe
110      210      215      220
113 Arg Val Lys Ser Arg His Lys
114 225      230
117 <210> SEQ ID NO: 4
118 <211> LENGTH: 235
119 <212> TYPE: PRT
120 <213> ORGANISM: Acropora aspera
122 <400> SEQUENCE: 4
124 Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
125 1      5      10      15
128 Val Asn Gly His Tyr Phe Glu Val Glu Gly Asp Gly Lys Gly Lys Pro
129      20      25      30
132 Tyr Glu Gly Glu Gln Thr Val Arg Leu Ala Val Thr Lys Gly Gly Pro
133      35      40      45
136 Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln Cys Gln Tyr Gly Ser
137      50      55      60
140 Ile Pro Phe Thr Lys Tyr Pro Glu Asp Ile Pro Asp Tyr Val Lys Gln
141 65      70      75      80
144 Ser Phe Pro Gly Arg Tyr Thr Trp Glu Arg Ile Met Asn Phe Glu Asp
145      85      90      95
148 Gly Ala Val Cys Thr Val Ser Asn Asp Ser Ser Ile Gln Gly Asn Cys
149      100     105     110
152 Phe Ile Tyr His Val Lys Phe Ser Gly Leu Asn Phe Pro Pro Asn Gly
153      115     120     125
156 Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Asn Thr Glu Arg
157      130     135     140
160 Leu Phe Ala Arg Asp Gly Met Leu Ile Gly Asn Asn Phe Met Ala Leu
161 145     150     155     160
164 Lys Leu Glu Gly Gly Gly His Tyr Leu Cys Glu Phe Lys Ser Thr Tyr
165      165     170     175
168 Lys Ala Lys Lys Pro Val Lys Met Pro Gly Tyr His Tyr Val Asp Arg
169      180     185     190
172 Lys Leu Asp Val Thr Asn His Asn Lys Asp Tyr Thr Ser Val Glu Gln
173      195     200     205
176 Cys Glu Ile Ser Ile Ala Arg Lys Pro Val Val Ala Cys Arg Phe Phe
177      210     215     220

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181 225                230                235
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187 <213> ORGANISM: Acropora aspera
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192 tacttttgagg tcgaaggcga tggaaaagga aagccttacg agggggagca gacggtaagg      120
194 ctggctgtca ccaagggcgg acctctgccca tttgcttggg atattttatc accacagtgt      180
196 cagtacggaa gcataccatt caccaagtac cctgaagaca tccctgacta tgtaaagcag      240
198 tcattcccgg ggagatatac atgggagagg atcatgaact ttgaagatgg tgcagtgtgt      300
200 actgtcagca atgattccag catccaaggc aactgtttca tctaccatgt caagttctct      360
202 ggtttgaact ttctctccaa tggacctgtt atgcagaaga agacacaggg ctgggaaccc      420
204 aacactgagc gtctctttgc acgagatgga atgctgatag gaaacaactt tatggctctg      480
206 aagttagaag gaggtggtca ctatttgtgt gaattcaaat ctacttaciaa ggcaaggaag      540
208 cctgtgaaga tgccagggtg tcaactatgtt gaccgcaaac tggatgtaac caatcacaac      600
210 aaggattaca cttccggttg gcagcgtgaa atttccattg cacgcaaacc tttggtcgcc      660
212 tgctgttttt tcagagtcaa atcaaggcac aaataagcag tggcgtaaaa aacgtagatt      720
214 ctgatttttag cttatagaag taggaacgaa gaagtgtaga caaccttcaa tgattaaact      780
216 tttgaaaaca acsccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagcggc cgctcgaatt      840
218 a
221 <210> SEQ ID NO: 6
222 <211> LENGTH: 841
223 <212> TYPE: DNA
224 <213> ORGANISM: Acropora aspera
226 <400> SEQUENCE: 6
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229 tacttttgagg tcgaaggcga tggaaaagga aagccttacg agggggagca gacggtaagg      120
231 ctggctgtca ccaagggcgg acctctgccca tttgcttggg atattttatc accacagtgt      180
233 cagtacggaa gcataccatt caccaagtac cctgaagaca tccctgacta tgtaaagcag      240
235 tcattcccgg ggagatatac atgggagagg atcatgaact ttgaagatgg tgcagtgtgt      300
237 actgtcagca atgattccag catccaaggc aactgtttca tctaccatgt caagttctct      360
239 ggtttgaact ttctctccaa tggacctgtt atgcagaaga agacacaggg ctgggaaccc      420
241 aacactgagc gtctctttgc acgagatgga atgctgatag gaaacaactt tatggctctg      480
243 aagttagaag gaggtggtca ctatttgtgt gaattcaaat ctacttaciaa ggcaaggaag      540
245 cctgtgaaga tgccagggtg tcaactatgtt gaccgcaaac tggatgtaac caatcacaac      600
247 aaggattaca cttccggttg gcagtggtgaa atttccattg cacgcaaacc tgtggtcgcc      660
249 tgccgttttt tcagagtcaa atcaaggcac aaataagcag tggcgtaaaa aacgtagatt      720
251 ctgatttttag cttatagaag taggaacgaa gaagtgtaaa caaccattaa tgattaaact      780
253 tttgaaaaca acgccataaa aaaaaaaaaa aaaaaaaaaa aaaaagcggc cgctcgaatt      840
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258 <210> SEQ ID NO: 7
259 <211> LENGTH: 18
260 <212> TYPE: PRT
261 <213> ORGANISM: Acropora aspera, Montipora caliculata and Porites murrayensis
263 <400> SEQUENCE: 7
265 Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
266 1                5                10                15

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269 Val Asn
273 <210> SEQ ID NO: 8
274 <211> LENGTH: 25
275 <212> TYPE: PRT
276 <213> ORGANISM: Porites lobata
278 <400> SEQUENCE: 8
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281 1 5 10 15
284 Val Asn Asn His Tyr Glu Phe Val Thr
285 20 25
288 <210> SEQ ID NO: 9
289 <211> LENGTH: 225
290 <212> TYPE: PRT
291 <213> ORGANISM: Discosoma sp.
293 <400> SEQUENCE: 9
295 Met Arg Ser Ser Lys Asn Val Ile Lys Glu Phe Met Arg Phe Lys Val
296 1 5 10 15
299 Arg Met Glu Gly Thr Val Asn Gly His Glu Phe Glu Ile Glu Gly Glu
300 20 25 30
303 Gly Glu Gly Arg Pro Tyr Glu Gly His Asn Thr Val Lys Leu Lys Val
304 35 40 45
307 Thr Lys Gly Gly Pro Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln
308 50 55 60
311 Phe Gln Tyr Gly Asn Lys Val Tyr Val Lys His Pro Ala Asp Ile Pro
312 65 70 75 80
315 Asp Tyr Lys Lys Leu Ser Phe Pro Glu Gly Phe Lys Trp Glu Arg Trp
316 85 90 95
319 Met Asn Phe Glu Asp Gly Gly Val Val Thr Val Thr Gln Asp Ser Ser
320 100 105 110
323 Leu Gln Asp Gly Cys Phe Ile Tyr Lys Val Lys Phe Ile Gly Val Asn
324 115 120 125
327 Phe Pro Ser Asp Gly Pro Val Met Gln Lys Lys Thr Met Gly Trp Glu
328 130 135 140
331 Ala Ser Thr Lys Arg Leu Tyr Pro Arg Asp Gly Val Leu Lys Gly Glu
332 145 150 155 160
335 Ile His Lys Ala Leu Lys Leu Lys Asp Gly Gly His Tyr Leu Val Glu
336 165 170 175
339 Phe Lys Ser Ile Tyr Met Ala Lys Lys Pro Val Gln Leu Pro Gly Tyr
340 180 185 190
343 Tyr Tyr Val Asp Ser Lys Leu Asp Ile Thr Ser His Asn Glu Asp Tyr
344 195 200 205
347 Thr Ile Val Glu Gln Tyr Glu Arg Thr Glu Gly Arg His His Leu Phe
348 210 215 220
351 Leu
352 225
355 <210> SEQ ID NO: 10
356 <211> LENGTH: 230
357 <212> TYPE: PRT
358 <213> ORGANISM: Discosoma sp.

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360 <400> SEQUENCE: 10

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362 Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val
363 1          5          10          15
366 Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
367          20          25          30
370 Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
371          35          40          45
374 Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe
375          50          55          60
378 Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg
379 65          70          75          80
382 His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
383          85          90          95
386 Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
387          100         105         110
390 Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
391          115         120         125
394 Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
395          130         135         140
398 Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
399 145         150         155         160
402 Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val
403          165         170         175
406 Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
407          180         185         190
410 Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
411          195         200         205
414 Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val
415          210         215         220
418 Thr Ala Ala Gly Ile Thr
419 225         230

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422 <210> SEQ ID NO: 11

423 <211> LENGTH: 20

424 <212> TYPE: DNA

C--> 425 <213> ORGANISM: Artificial

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428 <221> NAME/KEY: misc_feature

429 <223> OTHER INFORMATION: PCR Primers

432 <400> SEQUENCE: 11

433 tccggttatcg ctaaacagat

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436 <210> SEQ ID NO: 12

437 <211> LENGTH: 20

438 <212> TYPE: DNA

C--> 439 <213> ORGANISM: Artificial

441 <220> FEATURE:

442 <221> NAME/KEY: misc_feature

443 <223> OTHER INFORMATION: PCR Primers

446 <400> SEQUENCE: 12

447 tttgtgcctt gatttgactc

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VERIFICATION SUMMARY

DATE: 01/14/2002

PATENT APPLICATION: US/09/890,463

TIME: 11:45:05

Input Set : A:\ES.txt

Output Set: N:\CRF3\01142002\I890463.raw

L:27 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:
L:425 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
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L:453 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:467 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:481 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15